

Abstract

An anti-friction bearing is provided which is low in vibration and excellent in quietness. The anti-friction bearing has rolling elements provided in inner and outer ring raceway grooves, which are made of martensitic stainless steel composed of 0.60 to 0.75 percent of carbon by weight, 10.5 to 13.5 percent of chromium by weight, 1.0 percent or less of silicon by weight and 0.3 to 0.8 percent of manganese by weight, the remainder of the composition being iron and inevitably introduced impurities, having a hardness of HRC 58 or higher, containing eutectic carbide particles of 10 microns or less in diameter, having oxygen and titanium concentrations of 10 ppm or less respectively, and less than 10 percent by volume of retained austenite.